

August 23, 2024

Grand Panama Condominium 11800 Front Beach Road Panama City Beach, FL 32407

Attention: Derek Gilbert, CAM

Project: Grand Panama Condominium

Panama City Beach, FL

Regarding: Abbreviated Exterior Condition Survey – Skybridge

Mr. Gilbert:

Per your request, **BECI** visited Grand Panama Condominium in Panama City Beach, Florida on July 17, 2024, to perform an Abbreviated Condition Survey related to the building enclosure at the Skybridge at the above referenced property.

1.0 PURPOSE AND SCOPE

- 1.1 The purpose of our survey was to assess the exterior building components at the Skybridge, including but not limited to, the roof, cladding, windows, sealants, steel decking, steel columns, and framing.
- Observations enumerated within this report, unless stated as isolated, are intended to be general typical conditions observed at the time of our investigation. As such, our conclusions are based on our observations of the existing conditions. The observations and opinions provided in this report are the opinion of BECI and are based on our experience, as well as the information provided to BECI regarding the exterior building enclosure at Grand Panama Condominiums.
- 1.3 Components are assessed and rated as good, *fair*, *or poor*. An evaluation of *"good"* indicates almost new condition with no immediate attention required. A *"fair"* evaluation refers to an acceptable rate of use with no or few immediate needs. The *"poor"* evaluation indicates failure or partial failure and the need for immediate attention.

2.0 OBSERVATIONS

2.1 Upon arriving on-site, Derek Gilbert, CAM, provided general information about the Skybridge and recent projects. Mr. Gilbert informed BECI that the parking garage immediately adjacent to the Skybridge had recently undergone a restoration project in which the workmanship from the General Contractor was still under warranty. BECI observed the Skybridge to consist of a hollow steel section (HSS) superstructure with a corrugated steel roof deck and walking surface deck. BECI observed the Skybridge to be connected to the building by way of steel attachment brackets at the North and South Ends of the bridge. BECI observed the Skybridge roof to consist of standing seam metal roof panels (Reference Figure 2.1.1 and Photo Exhibit Nos. 1 through 4).



Figure 2.1.1 - Grand Panama - Skybridge

2.2 BECI began our observations at the **steel framing and columns** from the interior side of the Skybridge, as well as beneath the bridge. BECI observed the steel framing and columns to be in fair condition overall. BECI observed coating failure and surface corrosion to be typical at the steel bracing, columns, steel angle window attachment brackets, the Skybridge attachment brackets below the bridge, and roof purlins throughout the Skybridge assembly (Reference Figure 2.2.1 and Photo Exhibit Nos. 5 through 11). BECI did not observe any section loss of the steel framing components at areas of corrosion at the time of the inspection. However, if left unaddressed, corrosion will continue to deteriorate, eventually leading to section loss in the steel members, which can compromise the structural integrity of the Skybridge structure.



Figure 2.2.1 – Close-up view of failed coating and corrosion at steel roof purlin.

2.3 BECI also observed the **steel decking** at both the roof deck and walking surface deck to be in fair condition overall. BECI observed failed coatings and surface corrosion to be typical throughout the steel roof deck (Reference Photo Exhibit Nos. 12 and 13). BECI also observed an isolated area of abandoned fastener penetrations in the steel roof deck at the South End of the West Elevation, near the eave of the Skybridge roof (Reference Figure 2.3.1 and Photo Exhibit No. 14). Abandoned fastener penetrations, if left unaddressed, can allow the salt air from the coastal environment to prematurely deteriorate and corrode the surrounding steel roof deck.

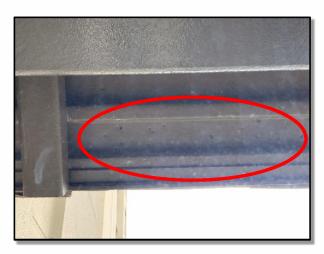


Figure 2.3.1 – Roof Deck – Overall view of abandoned fastener penetrations.

2.4 BECI observed the metal roof panels at the Skybridge to be in fair condition overall, at the time of the survey. BECI observed areas of what appeared to be impact or hail damage to be typical across the roof (Reference Photo Exhibit Nos. 15 and 16). BECI observed that the roofing underlayment was terminated below at the roof deck and was visible at the interior of the Skybridge near the South entrance, indicating that the roofing underlayment was not turned vertically up the wall behind the flashing, not in conformance with NRCA Roofing Standards (Reference Figure 2.4.1 and Photo Exhibit Nos. 17 and 18). BECI observed headwall flashing at the South end of the Skybridge roof had been sealed at the cladding level, sealing the drainage plane of the cladding assembly (Reference Figure 2.4.2 and Photo Exhibit Nos. 19 and 20). It should be noted that no leaking was reported at the time of our survey. However, this lack of redundancy in the waterproofing system makes the interior spaces vulnerable to moisture intrusion in the event of failure of the stucco cladding above the headwall flashing, the headwall flashing itself, or the roofing underlayment.



Figure 2.4.1 – Close-up view of roofing underlayment terminated at end of steel roof deck.



Figure 2.4.2 – Close-up view of headwall flashing sealed to conventional stucco cladding.

2.5 BECI then observed the **cladding** adjacent to the Skybridge as part of our survey. BECI observed the cladding to be in fair condition overall. BECI observed areas of staining at the stucco cladding beneath the bridge attachment brackets below the north end of the bridge (Reference Figure No. 2.5.1 and Photo Exhibit No. 21). BECI observed the concrete surfaces adjacent to the staining to be cracked and exposed to the elements, with no waterproofing observed (Reference Figure No. 2.5.2 and Photo Exhibit Nos. 22 through 24). If areas of uncoated and/or unsealed concrete are left unaddressed, the concrete can continue to absorb moisture potentially corroding the Skybridge attachment brackets prematurely.



Figure 2.5.1 – Overall view of staining at stucco cladding below Skybridge attachment bracket.



Figure 2.5.2 – Overall view of unsealed concrete surfaces adjacent to Skybridge.

2.6 BECI also observed the **windows** to be in fair condition overall. BECI observed oxidation of the window sill flashings and frames to be widespread across both the East and West Elevations. BECI observed faded finishes at the window frames to be widespread as well,

indicating that the windows are nearing the end of their remaining useful life (RUL) (Reference Figure 2.6.1. and Photo Exhibit Nos. 25 and 26).



Figure 2.6.1 – Overall view of faded coatings and oxidation at window sill frame and flashing.

2.7 BECI also observed the sealants to be in fair condition overall, exhibiting isolated areas of failure at the north headwall flashing and the north expansion joint at the Skybridge interior (Reference Figure 2.7.1 and Photo Exhibit Nos. 27 and 28). BECI also observed missing sealants at the Skybridge-to-parking garage interface at the West Elevation, where the skybridge wall framing was left exposed (Reference Figure 2.7.2 and Photo Exhibit Nos. 29 and 30). If missing and failed sealants are left unaddressed, moisture can penetrate the Skybridge enclosure, prematurely deteriorating the underlying roofing components and steel superstructure.



Figure 2.7.1 – Close-up view of isolated area of failed sealant at North expansion joint.



Figure 2.7.1 – Close-up view of missing sealant at Skybridge-to-Parking Garage interface.

3.0 CONCLUSIONS AND RECOMMENDATIONS

BECI is of the opinion that the Skybridge components were of safe and adequate performance at the time of our survey. BECI is of the opinion that the Skybridge components are in need of a restoration project to promote the longevity of the building components over time.

- 3.1 BECI recommends that all corrosion, oxidation, and existing coatings at all steel framing members, columns, decking, and steel attachment brackets be removed until bright steel is observed. BECI recommends that new high-performance marine-grade coatings be applied to all steel components to prevent further corrosion and deterioration within the next 12-18 months. BECI also recommends that adjacent concrete surfaces be repaired and waterproofed within the next 12-18 months in conjunction with the application of new metal coatings and removal and replacement of existing sealants.
- 3.2 BECI also recommends that the existing headwall flashings be removed, that the existing roofing underlayment be integrated with the existing waterproofing at the cladding of the vertical wall, and that new headwall flashings be installed and left unsealed to promote drainage of the cladding assembly above. BECI recommends that consideration be given to removing and replacing the Skybridge roof with a new roof system within the next 4 5 years.
- 3.3 BECI is also of the opinion that the windows are nearing the end of their remaining useful life. BECI recommends that consideration be given to removing and replacing the windows at the Skybridge within the next 2 3 years.

Thank you for the opportunity to be of service. We trust that this report is informative and will assist the Association in identifying scope items to be included during the next restoration. Please contact our Destin office with questions or if you wish to discuss this report in further detail.

REPORT BY:

BECI

Gordon Porter, REWO, FAA sUAS

Project Manager II Branch Manager

Attachements: Appendix A: BECI Photo Exhibit (5 Pages)





Photo 1
East Elevation – Overall view.



Photo 2
West Elevation – Overall view.



Photo 3
East Elevation – Overall view.



Photo 4
Skybridge – Overall aerial view.



Photo 5
Interior – Close-up view of failed coating and corrosion at steel roof purlin.



Photo 6
West Elevation – Overall view of corroded attachment brackets and framing members.





Photo 7 Interior – Overall view of corrosion at roof purlin.



Photo 8
West Elevation – Overall view of corrosion at roof purlin and steel beam.



Photo 9
Interior – Overall view of failed coatings at steel beam.



Photo 10
Interior – Overall view of failed coatings at steel beam.



Photo 11
Interior – Overall view of failed coatings and corrosion at roof purlin.



Photo 12
Interior – Overall view of failed coatings at the steel roof deck.





Photo 13
Interior – Overall view of failed coatings at the steel roof deck.



Photo 14
West Elevation – Overall view abandoned fasteners at the South end of the Skybridge.



Photo 15
Roof – Overall view impact damage to the roof panels.



Photo 16
Roof – Overall view impact damage to the roof panels.



Photo 17
South Elevation – Overall view of the roofing underlayment terminated below the roof deck.



Photo 18
South Elevation – Overall view of the roofing underlayment terminated below the roof deck.





Photo 19
South Elevation – Overall view of the headwall flashing sealed to the conventional stucco cladding.



Photo 20
South Elevation – Overall view of the headwall flashing sealed to the conventional stucco cladding.



Photo 21

North Elevation – Overall view of staining at the stucco cladding beneath the Skybridge attachment bracket.



Photo 22
Parking Garage – Overall view of unsealed concrete adjacent to the stained stucco cladding.



Photo 23
Parking Garage – Overall view of cracked and unsealed concrete column.



Photo 24
Parking Garage – Overall view of cracked and unsealed concrete knee wall.





Photo 25
Window Assemblies – Overall view of faded finish and oxidation at the window sill frame and flashing.

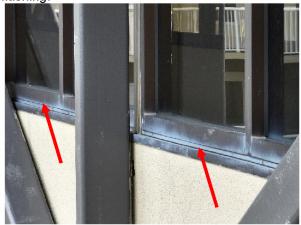


Photo 26
Window Assemblies – Overall view of faded finish and oxidation at the window sill frame and flashing.



Photo 27
North Entrance – Overall view of isolated failed sealant at the expansion joint.



Photo 28

North Entrance – Overall view of isolated failed sealant at the expansion joint.



Photo 29
Skybridge-to-Garage Interface – West Elevation –
Overall view of missing sealant and exposed framing.

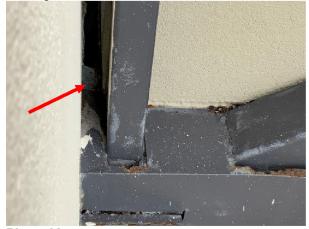


Photo 30Skybridge-to-Garage Interface – West Elevation – Overall view of missing sealant and exposed framing.